- (3) When operating at flight level 290 and above, and—
- (i) On a magnetic course of zero degrees through 179 degrees, any flight level, at 4,000-foot intervals, beginning at and including flight level 290 (such as flight level 290, 330, or 370); or
- (ii) On a magnetic course of 180 degrees through 359 degrees, any flight level, at 4,000-foot intervals, beginning at and including flight level 310 (such as flight level 310, 350, or 390).

§91.181 Course to be flown.

Unless otherwise authorized by ATC, no person may operate an aircraft within controlled airspace under IFR except as follows:

(a) On a Federal airway, along the centerline of that airway.

(b) On any other route, along the direct course between the navigational aids or fixes defining that route. However, this section does not prohibit maneuvering the aircraft to pass well clear of other air traffic or the maneuvering of the aircraft in VFR conditions to clear the intended flight path both before and during climb or descent

§91.183 IFR radio communications.

The pilot in command of each aircraft operated under IFR in controlled airspace shall have a continuous watch maintained on the appropriate frequency and shall report by radio as soon as possible—

- (a) The time and altitude of passing each designated reporting point, or the reporting points specified by ATC, except that while the aircraft is under radar control, only the passing of those reporting points specifically requested by ATC need be reported;
- (b) Any unforecast weather conditions encountered; and
- (c) Any other information relating to the safety of flight.

§91.185 IFR operations: Two-way radio communications failure.

- (a) *General.* Unless otherwise authorized by ATC, each pilot who has twoway radio communications failure when operating under IFR shall comply with the rules of this section.
- (b) *VFR conditions.* If the failure occurs in VFR conditions, or if VFR con-

ditions are encountered after the failure, each pilot shall continue the flight under VFR and land as soon as practicable.

- (c) *IFR conditions*. If the failure occurs in IFR conditions, or if paragraph (b) of this section cannot be complied with, each pilot shall continue the flight according to the following:
- (1) *Route.* (i) By the route assigned in the last ATC clearance received;
- (ii) If being radar vectored, by the direct route from the point of radio failure to the fix, route, or airway specified in the vector clearance;
- (iii) In the absence of an assigned route, by the route that ATC has advised may be expected in a further clearance: or
- (iv) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route filed in the flight plan.
- (2) Altitude. At the highest of the following altitudes or flight levels for the route segment being flown:
- (i) The altitude or flight level assigned in the last ATC clearance received;
- (ii) The minimum altitude (converted, if appropriate, to minimum flight level as prescribed in §91.121(c)) for IFR operations; or
- (iii) The altitude or flight level ATC has advised may be expected in a further clearance.
- (3) Leave clearance limit. (i) When the clearance limit is a fix from which an approach begins, commence descent or descent and approach as close as possible to the expect-further-clearance time if one has been received, or if one has not been received, as close as possible to the estimated time of arrival as calculated from the filed or amended (with ATC) estimated time en route.
- (ii) If the clearance limit is not a fix from which an approach begins, leave the clearance limit at the expect-further-clearance time if one has been received, or if none has been received, upon arrival over the clearance limit, and proceed to a fix from which an approach begins and commence descent or descent and approach as close as possible to the estimated time of arrival as calculated from the filed or